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**MALAYSIAN FOOD INDUSTRY ACCEPTANCE OF  
GENETICALLY MODIFIED FOOD**

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**UUM**  
**Universiti Utara Malaysia**

**MASTER OF SCIENCE**  
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**August 2016**

**MALAYSIAN FOOD INDUSTRY ACCEPTANCE OF GENETICALLY  
MODIFIED FOOD**

**By**



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**UUM**  
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**Thesis submitted to  
Othman Yeop Abdullah Graduate School of Business,  
Universiti Utara Malaysia,  
in Partial Fulfillment of The Requirement for The Degree of Master**



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(College of Business)  
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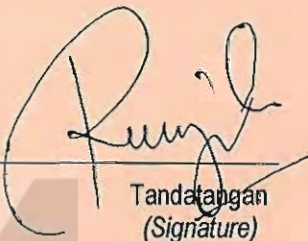
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## Abstract

The acceptance of an industry towards new technology would help them to be remained in the current competitive global market. For instance, Genetically Modified Food (GMF) is a new technology in Malaysia, also known as food biotechnology which has been produced through the modern genetic engineering method. Through the acceptance for commercializing GMF in the food production, comes many advantages for the food industry. Unfortunately, acceptance of GMF itself is an issue as portion of the food industry still prefer to accept and use non-GMF rather than GMF in their food production process. This circumstance happens due to several elements such as the strategy of the industry itself, complexity or stringency of government's regulation as well as attitude shown by the stakeholders towards the usage of GMF. Although past studies indicated industry strategy, regulation and attitude are significant in influencing industry acceptance of GMF, there has been comparatively little research which examines the relationship between these variables. In order to fill this gap, a survey was conducted on 248 processed food industries throughout Malaysia in order to examine the relationship of industry strategy, regulation and attitude on industry acceptance of GMF. In regards to Pearson correlation, the acceptance of GMF in the Malaysian food industries inherently increased due to the implementation or support of proper strategy, systematic regulatory system and positive attitude's feedback or response gained from the food manufacturers. Consequently, GMF acceptance among food industries contributed to the enhancement and development of Malaysia's economy and performance.

**Keywords:** Genetically Modified Food, Genetic Engineering, Food Industry, Acceptance, Malaysia

## Abstrak

Penerimaan teknologi baru merupakan pemangkin kepada sesebuah industri untuk terus kekal dalam pasaran global yang kompetitif pada masa kini. Sebagai tamsilnya, makanan terubahsuai genetik (GMF) merupakan teknologi baru di Malaysia. GMF ini juga dikenali sebagai makanan bioteknologi yang telah dihasilkan melalui kaedah kejuruteraan genetik moden. Terdapat pelbagai kelebihan terhadap industri makanan yang menunjukkan penerimaan untuk mengkomersilkan GMO dalam pengeluaran makanannya. Malangnya, penerimaan GMF itu sendiri telah mencetuskan isu kerana terdapat sebahagian industri makanan yang lebih cenderung untuk menerima dan menggunakan bahan bukan GMF berbanding GMF dalam proses pengeluaran makanan industri mereka. Situasi ini berlaku disebabkan oleh beberapa elemen. Antaranya, strategi industri itu sendiri, kerumitan atau kesulitan undang-undang kerajaan dan juga sikap yang ditunjukkan oleh pihak pengeluar makanan terhadap penggunaan GMF. Walaupun kajian lepas menunjukkan strategi industri, undang-undang dan sikap merupakan perkara penting yang mempengaruhi penerimaan GMF dalam sesebuah industri, namun jumlah penyelidikan yang mengkaji hubungan antara pemboleh ubah ini masih lagi terhad. Dalam usaha untuk mengisi jurang tersebut, kajian ini telah dilaksanakan terhadap 248 industri pemprosesan makanan di seluruh Malaysia yang bertujuan mengkaji hubungan antara strategi industri, undang-undang dan sikap terhadap penerimaan GMF dalam sesebuah industri. Berdasarkan analisis korelasi Pearson, keputusan menunjukkan bahawa peningkatan penerimaan GMF dalam industri makanan di Malaysia adalah didorong oleh pelaksanaan atau sokongan daripada strategi yang bersesuaian, sistem perundangan secara sistematik dan maklum balas atau tindak balas positif yang diperolehi daripada pengeluar makanan. Oleh itu, penerimaan GMF dalam kalangan industri makanan menyumbang kepada peningkatan dan pembangunan ekonomi dan prestasi Malaysia.

**Kata Kunci:** Makanan Terubahsuai Genetik, Kejuruteraan Genetik, Industri Makanan, Penerimaan, Malaysia



## Acknowledgement

In the name of Allah SWT, the Most Gracious and the Most Merciful, I am grateful for giving me the strength to complete this thesis. This thesis would not have been completed without the support and assistance of many people. First and foremost, my sincere gratitude and appreciation goes to my supervisor, Dr. Risyawati Mohamed Ismail for her constructive ideas, criticisms, guidance and patience throughout the duration of preparing this thesis. She has successfully guided me through some stressful times and were always willing to sharpen my understanding of this thesis and other academic writings. It was a great privilege to work under her supervision due to her professional expertise and many insightful comments had contributed tremendously in focusing my thoughts and ideas.

I would also like to thank the respondents from food companies for their invaluable help during data collection. Special thanks are extended to all the respondents who have given their cooperation in completing the survey. A note of thanks also goes to all my beloved friends : Sitti Aminah Baharudin, Lim Chang Hong, Hadiati Fitri and Monther Mohamed Youseff Aljarrah for their moral support, encouragement and great words of motivation when I seriously need someone to eat, laugh and listen on my story.

Finally and most importantly, I would like to extend my gratitude, appreciation and affection to my lovely father, Hussin Babu and my mother, Jamilah Said as well as my younger sisters, Angah, Kakak and Adik who have given me their prayers, encouragement, unflinching support, overwhelming patience and inspiration for me to go through this journey especially during the time when my health was in horrible and fully relied on my family. I am forever indebted to their never-ending love towards myself.

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## **List of Abbreviation**

GMF	Genetically Modified Food
GMO	Genetically Modified Organism
MOH	Ministry Of Health
JAKIM	Department of Islamic Development Malaysia
HACCP	Hazard Analysis Critical Control Point
GMP	Good Manufacturing Practice
MATRADE	Malaysian External Trade Development Corporation
MARDI	Malaysian Agricultural Research and Development Institute
NRE	Natural Resources and Environment
GMAC	Genetic Modification Advisory Committee
FSQD	Food Safety and Quality Division
WHO	World Health Organization
FAO	Food & Agriculture Organization
UN	United Nations
EU	European Union
HSE	Health and Safety Executive
FSANZ	Standard Australia New Zealand
GEAC	Genetic Engineering Approval Committee
AQIS	Australian Quarantine and Inspection Service
MAFF	Ministry of Agriculture, Forestry and Fisheries
ACNFP	Advisory Committee on Novel Food and Processors
HSNO	Hazardous Substance and New Organism

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Background of the Study**

The acceptance of new technology in Malaysian industry could lead them to be remained in the current competitive global market due to complexity and continually changing environment in those industries, market liberalization, globalization, dynamic and diverse customers demand as well as increased competition pressure among the industries (Rudder, 2001; Saguy & Sirotinskaya, 2014; Stronen, 2011). In the context of this research, the focus concerns on the industry acceptance towards Genetically Modified food (GMF) as portion of new technology in the Malaysian industry's sector for the purpose to retain the loyalty of the existing customers and creating differentiation of product.

Simultaneously, the acceptance of new GMF technology among the industries would contribute to the development of Malaysia in several ways. Firstly, the industry acceptance towards GMF would help to increase the income of this nation. This circumstance happens because the industry is referred to the manufacturing sector which is being classified under one of the industry sectors that would contribute to boost up the Malaysia's income (Federation of Malaysian Manufacturers (FMM), 2014). As stated by the Economic Planning Unit of Prime Minister Department Malaysia and Department of Statistics Malaysia (2015), the manufacturing industry contributes 53.5 billion of sales revenue or 4 % annual percentage changes to Malaysia's gross domestic product (GDP) in 2014. In the same year, total merchandise export stated 58.9 billion and index of

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## Reference

- Abu Bakar, U. K. (2007). *Commercialisation of Biotech Crop in Asia Course : Benefits to MARDI and Malaysia*. Retrieved from Biotechnology Research Centre, MARDI, Malaysia
- Ackoff, R. L. (1990). Strategy. *System Practice*, 3(6), 521–524.
- Adell, E. (2010). Acceptance of driver support system. *Human Centred Design For Intelligent Transport System*, 475–486.
- Adenle, A. A., Morris, E. J., & Parayil, G. (2013). Status of development, regulation and adoption of GM agriculture in Africa : views and positions of stakeholder groups. *Food Policy*, 43, 159–166.
- Aerni, P. (2005). Stakeholder attitude towards the risks and benefits of genetically modified crops in South Africa. *Environmental Science & Policy*, 8, 464–476.
- Ahmad, A., Noor, N., Ridzwan, N. M., Noor, S. M., Sanip, N. M. A., & Bacheck, N. Z. (2008). *R&D biotechnology project monitoring report 2008*. Retrieved from [www.mosti.gov.my](http://www.mosti.gov.my)
- Ajzen, I. (1985). *"From intentions into actions. A theory of planned behaviour* (Kuhl, J. B.). New York: Springer Verlag.
- Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behavior and Human Decision Processes*, 50, 179–211.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice Hall.
- Al-Saffy, T., & Mousa, H. (2012). *Agriculture biotechnology annual*.
- Amin, L., Ahmad, J., Md. Jahi, J., Md. Nor, A. R., Osman, M., & Mahadi, N. M. (2010). Factors influencing Malaysian public attitude to agro-biotechnology. *Public Understanding Science*, 20(5), 674–689.
- Amin, L., Azlan, N. A. A., Ahmad, J., & Ibrahim, R. (2011). Public perception of the ethical aspects of golden rice in Malaysia. *Science in Society*, 2(3).
- Amin, L., Hashim, H., Sidik, N. M., Zainol, Z. A., & Nurina, A. (2011). Public attitudes towards modern biotechnology. *African Journal of Biotechnology*, 10(58), 12409–12417. doi:10.5897/AJB11.1061
- Amin, L., Jahi, J. M., & Nor, A. R. M. (2010). Malaysian public awareness & knowledge on modern biotechnology. *Journal of General Studies*, 8.
- Amin, L., Jahi, J. M., & Nor, A. R. M. (2013). Stakeholders' attitude to genetically modified foods and medicine. *The Scientist World Journal*. doi:<http://dx.doi.org/10.1155/2013/516742>
- Amin, L., Jahi, J. M., Nor, A. R. M., Osman, M., & Mahadi, N. M. (2008). Malaysian

- Public Attitude Towards Several Modern Biotechnology Applications. In *6th WSEAS Int. Conference on Environment, Ecosystems and development (EED'08)* (pp. 54–62).
- Anseel, F., Lievens, F., & Schollaert, E. (2010). *Response Rates in Organizational Science, 1995-2008: A Meta-analytic Review and Guidelines for Survey Researchers*.
- Areal, F. J., Riesgo, L., & Rodriguez, E. (2011). Attitudes of European farmers towards GM crop adoption. *Plant Biotechnology Journal*, 9, 945–957. doi:10.1111/j.1467-7652.2011.00651.x
- Arshad, F. (2011). Legislation of Genetically Modified Food. In *MIFT Seminar*.
- Ausserer, K., & Risser, R. (2005). Intelligent transport systems and services-chances and risk. In *Proceeding of 18th ICTCT-workshop Helsinki*.
- Australian Trade Commision. (2015). Tariffs and regulations - Saudi Arabia. Retrieved March 1, 2015, from <http://www.austrade.gov.au/Export/Export-Markets/Countries/Saudi-Arabia/Doing-business/Tariffs-and-regulations#.VPKnsC5gGSo>
- Avermaete, T., & Morgan, E. J. (2003). Determinants of innovation in small food firms, 6(1), 8–17. doi:10.1108/14601060310459163
- Avermaete, T., Viaene, J., Morgan, E. J., & Mahon, D. (2004). Determinants of product and process innovation in small food manufacturing, 15, 474–483. doi:10.1016/j.tifs.2004.04.005
- Azadi, H., & Ho, P. (2010). Genetically modified and organic crop in developing countries: A review of options for food security. *Biotechnology Advances*, 28, 160–168.
- Baker, G. A., & Burnham, T. A. (2001). Consumer Response to Genetically Modified Foods: Market Segment Analysis and Implications for Producers and Policy Makers. *Journal of Agricultural and Resource Economics*, 26(2), 387–403.
- Batie, S. (2008). Wicked problems and applied economics. *Agro Economic*, 90, 1176–1191.
- Baudouin, K. (2012). Working with wicked problem. Retrieved February 3, 2015, from <http://www.kbs-frb.be/publication.aspx?id=303257&langtype=1033>
- Bauer, M., & Gaskell, G. (1984). Promise, Problems and Proxies: 25 Years of European Biotechnology Debate and Regulation (pp. 1–62).
- Bett, C., Ouma Okura, J., & De Groote, H. (2010). Perspectives of gatekeepers in the Kenyan food industry towards genetically modified. *Food Policy*, 35, 332–340.
- Bord, R. J., & O'Connor, R. E. (1992). Determinants of risk perceptions of a hazardous waste site. *Risk Analysis*, 12(3).
- Bowling, A. (2002). *Research Methods in Health. Investigating health and health services* (Second.). Buckingham: Open University Press.
- Braitwaite, J., & Peter, D. (2000). *Global business regulation*. Cambridge, United Kingdom: Cambridge University Press.

- Brandys, P. (1988). Growing an international biotechnology. *National Biotechnology*, 16, 5.
- Bredahl, L. (1999). Consumers' cognitions with regard to genetically modified foods. *Appetite*, 33, 343–360.
- Bredahl, L. (2001). Determinants of consumer attitudes and purchase intentions with regard to genetically modified food—results of a cross-national survey. *Journal of Consumer Policy*. Retrieved from <http://link.springer.com/article/10.1023/A:1010950406128>
- Bredahl, L. (2001). Determinants of consumer attitudes and purchase intentions with regard to genetically modified foods- results of a cross-national survey. *Journal of Consumer Policy*, 24(1), 23–61.
- Bredahl, L., Grunert, K. G., & Frewer, L. J. (1998). Consumer attitudes and decision-making with regard to genetically engineered food products - A review of the literature and a presentation of models for future research. *Journal of Consumer Policy*, 21(3), 251.
- Brossard, D., Shanahan, J., & Nesbit, T. C. (2007). *The public, the media and agricultural biotechnology*. Cambridge: CABI International.
- Bukszar, E., & Connolly, T. (1988). Hindsight bias and strategic choice: some problems in learning from experience. *Academy of Management Journal*, 31, 628–641.
- Cacioppo, J. T., Gardner, W. L., & Berntson, G. G. (1997). Beyond bipolar conceptualizations and measures: The case of attitudes and evaluative space. *Personality and Social Psychology Review*, 1, 3–25.
- Caswell, J. A. (1998). How labeling of safety and process attributes affects markets for food. *Agricultural and Resource Economic Review*.
- Ceccoli, S., & Hixon, W. (2011). Explaining attitudes toward genetically modified foods in the European Union. *International Political Science Review*, 33(3), 301–319. doi:10.1177/0192512111418788
- Chang, I., Hwang, W., & Li, Y. (2007). Physicians' acceptance of pharmacokinetics-based clinical decision support system. *Expert System with Applications*, 33, 296–303.
- Chen, M. (2008). An integrated research framework to understand consumers attitude and purchase intentions towards genetically modified foods. *British Food Journal*, 110(6), 559–579.
- Chen, M. (2011). The gender gap in food choice motives as determinants of consumers' attitudes toward GM foods in Taiwan. *British Food Journal*, 113(6), 697–709. doi:10.1108/00070701111140052
- Chen, M., & Li, H. (2007). The consumer's attitude toward genetically modified foods in Taiwan. *Food Quality and Preference*, 18(40), 662–674. doi:10.1016/j.foodqual.2006.10.002
- Chi-Ham, C., Bennett, C., Barrows, G., Sexton, S., & Ziberman, D. (2013). Agricultural biotechnology: Economics, Environment, Ethics, and the Future. *The Annual Review of Environment and Resources*, 38, 249–279.



- Chin, K.-S., Chan, B. L., & Lam, P.-K. (2008). Identifying and prioritizing critical success factors for coopetition strategy. *Industrial Management & Data Systems*, 108(4), 437–454. doi:10.1108/02635570810868326
- Chopra, P., & Kamma, A. (2013). *Genetically Modified Crops in India- The current status of GM crops in India*. Retrieved from <http://www.ifpri.org/sites/default/files/publications/ib80.pdf>
- Choudhary, B., Gheysen, G., Buysse, J., Meer, P. V. D., & Burssens, S. (2014). Regulatory options for genetically modified crops in India. *Plant Biotechnology Journal*, 122, 135–146.
- Christoph, I. B., Bruhn, M., & Roosen, J. (2008). Knowledge, attitudes towards and acceptability of genetic modification in Germany. *Appetite*, 51, 58–68. doi:10.1016/j.appet.2007.12.001
- Chua, J. (2001). Genetically modified foods: A primer. *CBC Consumer indepth- GM foods*. Retrieved February 9, 2015, from [www.cbc.ca/consumers/indepth/gmos](http://www.cbc.ca/consumers/indepth/gmos)
- Coakes, S. J. (2013). *SPSS: Analysis without anguish: version 20.0 for windows*. Australia: John Wiley & Sons Australia, Ltd.
- Coakes, S. J., & Ong, C. (2011). *SPSS: Analysis without anguish: Version 18 for windows* (Version 18.). Australia: John Wiley & Sons Australia, Ltd.
- Connor, M., & Siegrist, M. (2010). Science Communication. *Science Communication*, 32(4), 514–538. doi:10.1177/1075547009358919
- Cooper, D. ., & Schindler, P. S. (2003). *Business research methods*. McGraw-Hill.
- Cooper, R. ., & Kleinschmidt, E. (1987). New products: what separates winners from losers? *Product Innovation Management*, 4(3), 169–184.
- Corder, G. W., & Foreman, D. I. (2009). *Nonparametric statistics for non-statisticians. A step by step approach*. Canada: John Wiley & Sons, Inc.
- Costa-Font, M., & Gil, J. M. (2012). Meta-attitudes and the local formation of consumer judgments towards genetically modified food. *British Food Journal*, 114(10), 1463–1485. doi:10.1108/00070701211263028
- Costanigro, M., & Lusk, J. L. (2014). The signaling effect of mandatory labels on genetically engineered food. *Food Policy*, 49, 259–267. doi:10.1016/j.foodpol.2014.08.005
- Cui, A. ., Griffith, D. A., & Cavusgil, S. . (2005). The influence of competitive intensity and market dynamism on knowledge management capabilities of multinational corporation subsidiaries. *International Marketing*, 13(3), 32–53.
- Dacin, M. T., Goodstein, J., & Scott, W. (2002). Institutional theory and institutional change: Introduction to the special research forum. *Academy of Management Journal*, 42(1), 95–125.
- Daft, R., & Weick, K. (1984). Toward a model of organizations and interpretation system. *Academy of Management Review*, 9, 284–296.
- Dangayach, G. S., & Deshmukh, S. G. (2001). Manufacturing strategy: literature review and some issues. *International Journal of Operations & Production Management*,

21(7), 884–932.

- Daud, M. H. (2002). The current and future outlook of agricultural biotechnology in Malaysia. *Asian Biotechnology and Development Review.*, 5(1), 15 – 21.
- Davis, F. D. (1989). Perceived Usefulness, perceived ease of use and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340.
- De Winter, J. C. F., Dodou, D., & Wieringa, P. A. (2009). Exploratory Factor Analysis With Small Sample Sizes. *Multivariate Behavioral Research*, 44(2), 147–181. doi:10.1080/00273170902794206
- Dentoni, D., Bitzer, V., & Pascucci, S. (2012). Cross-sector partnerships and the co-creation of dynamic capabilities for stakeholder orientation. *Journal of Business Ethics*.
- Department of Standard Malaysia. (2014). ACB-Good Manufacturing Practice for Food (GMP). Retrieved from <http://www.standardsmalaysia.gov.my/documents/10179/25811/ACB-GMP, Issue 1, 18 June 2013.pdf>
- Department of Statistics Malaysia. (2015). Manufacturing. Retrieved March 30, 2015, from [http://www.statistics.gov.my/index.php?r=column/ctwoByCat&parent\\_id=89&menu\\_id=SjgwNXdiM0JT3Q2TDBIWXdKdUVldz09](http://www.statistics.gov.my/index.php?r=column/ctwoByCat&parent_id=89&menu_id=SjgwNXdiM0JT3Q2TDBIWXdKdUVldz09)
- Doubleday, R. (2005). *Corporation, controversy, genetically modified food*. University College London.
- Douglas, M., & Wildavsky, A. (1982). *Risk and culture*. Berkeley, CA: University of California Press.
- Dutton, J., & Duncan, R. . (1987). The creation of momentum for change through the process of strategic issue diagnosis. *Strategic Management Journal*, 8, 279–295.
- Dutton, J., Fahey, L., & Narayanan, U. (1987). Toward understanding strategic issue diagnosis. *Strategic Management Journal*, 12, 76–90.
- Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Harcourt Brace Jovanovitch.
- Economic Planning Unit of Prime Minister Department Malaysia. (2015). GDP manufacturing industry in 2015. Retrieved March 30, 2015, from <http://www.epu.gov.my/en/industrial-production-indicators;jsessionid=0CC10883D5578BDD84C190B6B9D9B645>
- Eden, L., & Miller, S. (2004). *Distance matter: liability of foreignness, institutional distance and ownership strategy*. (M. Hitt & J. Cheng, Eds.) (Advances i.). New York: Elsevier.
- Edginton, S. (1999). A new model for bioentrepreneurship? *National Biotechnology*, 17, 1.
- Einsiedel, E. F. (2000). Cloning and its discontents: A canadian perspective. *Nature Biotechnology*, 18(9), 943–4.
- El Feki, S. (2000). Survey of agriculture and technology. *Economist*, 3–6.

- Ellahi, B. (1994). Genetic Engineering for Food Production – What Is It All About? *Genetic Engineering for Food Production*, 96(8), 13–23.
- Ellahi, B. (1996). Genetic modification for the production of food : the food industry ' s response. *British Food Journal*, 98(4,5), 53–72.
- Ellis, G. C. (2006). *Report on the Status of Agricultural Biotechnology, R & D and Intellectual Property in Malaysia and Thailand 2006*. Davis, California.
- Ernst & Young. (2011). *National innovation strategy- biotechnology*.
- Escaler, M., Teng, P., & Powel, A. (2011). The need for new agriculture, biotechnology, biotechnology and bioscience entrepreneurship in the Asia-Pacific regions. *Technology Monitor*, 14–23.
- FAO, UN, & WHO. (2004). *Food safety legislation - science and risk-based approaches to harmonization*. Seremban, Malaysia.
- Fauziah, A. (2011). Legislation on genetically modified foods. *MIFT Seminarar “Genetically Modified Foods.”*
- Federation of Malaysian Manufacturers. (2014). *Malaysian Industries*.
- Finucane, M. L., & Holup, J. L. (2005). Psychosocial and cultural factors affecting the perceived riskof genetically modified food: an overview of the literature. *Social Science & Medicine*, 60, 1603–1612. doi:10.1016/j.socscimed.2004.08.007
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: an introduction to theory and research*. Addison-Wesley.
- Flint, J., Gil, L., Verastegui, J., Irarrazabal, C., & Dellacha, J. (2000). Biosafety information management systems. A comparative analysis of the regulatory systems in Canada, Argentina, and Chile. *EJB Electronic Journal of Biotechnology*, 3(1), 9–28.
- Flynn, J., Burns, W., Mertz, C. K., & Slovic, P. (1992). Trust as a determinant of opposition to a high-level radioactive waste repository : Analysis of a structural model. *Risk Analysis*, 12(3), 417–429.
- Food Safety & Quality Division (MOH). (2015). Food Act 1983 & Food Regulation 1985. Retrieved February 27, 2015, from <http://fsq.moh.gov.my/v4/index.php/perundangan2/food-act-1983>
- Food Safety and Standards Authority of India. (2008). *Operationalizing the Regulation of Genetically Modified Foods in India* Food Safety and Standards Authority of India. Retrieved from [http://www.fssai.gov.in/Portals/0/Pdf/fssa\\_interim\\_regulation\\_on\\_Operatonalising\\_GM\\_Food\\_regulation\\_in\\_India.pdf](http://www.fssai.gov.in/Portals/0/Pdf/fssa_interim_regulation_on_Operatonalising_GM_Food_regulation_in_India.pdf)
- Foster, M., Berry, P., & Hogan, J. (2003). *Market access issues for GM products. Implications for Australia. Agriculture*.
- Freese, W., & Schubert, D. (2004). Safety testing and regulation of genetically engineered foods. *Biotechnology and Genetic Engineering Review*, 21.
- Freudenburg, W. R. (1993). Risk and recreancy : Weber, the division of labour and the rationality of risk perceptions. *Journal of Social Issue*, 71(4), 909–932.

- Frewer, L. J., Coles, D., Houdebine, L.-M., & Kleter, G. A. (2014). Attitudes towards genetically modified animals in food production. *British Food Journal*, 116(8), 1291–1313.
- Frewer, L. J., Howard, C., & Shepherd, R. (1996). The influence of realistic product exposure on attitude towards genetic engineering of food. *Food Quality and Preference*, 7(1), 61–67.
- Frewer, L. J., Howard, C., & Shepherd, R. (1996). The influence of realistic product exposure on attitudes towards genetic engineering of food. *Food Quality and Preference*, 7(1), 61–67.
- Frewer, L. J., Howard, C., & Shepherd, R. (1997). Public concerns in the United Kingdom about general and specific applications of genetic engineering: Risk benefit and ethics. *Science, Technology & Human Values*, 22, 98–124.
- Frewer, L. J., Howard, C., & Shepherd, R. (1997). Public Concerns in the United Kingdom about General and Specific Applications of Genetic Engineering: Risk, Benefit, and Ethics. *Science, Technology & Human Values*, 22(1), 98–124. doi:10.1177/016224399702200105
- Frewer, L. J., Scholderer, J., & Bredahl, L. (2003). Communicating about the risks and benefits of genetically modified foods: The mediating role of trust. *Risk Analysis*, 23(6).
- Frewer, L., Lassen, J., Kettlitz, B., Scholderer, J., Beekman, V., & Berdal, K. G. (2004). Societal aspects of genetically modified foods. *Food and Chemical Toxicology*, 42, 1181–1193.
- FSANZ. (2005). *Safety assessment of genetically modified foods* (Vol. 3). doi:10.1525/gfc.2003.3.3.89
- Gardini, M. A. F. (2013). *Establishment of the Uruguayan biosafety framework and regulatory perspective of environmental risk assessment for transgenic crops engineered with complex traits*.
- Gaskell, G., Allum, N., Bauer, M., Durant, J., Allansdottir, A., Bonfadelli, H., ... Wagner, W. (2000). Biotechnology and the European public, 18(September).
- Gay, L. R., & Diehl, P. L. (1996). *Research methods for business and management*. (Simon & Schuster, Ed.) (Internatio.). Singapore: Asia Pte. Ltd.
- Giannakas, K., & Fulton, M. (2002). Consumption effects of Genetic Modification : What if consumers are right? *Agricultural Economics*, 27, 97–109.
- Gruere, G. ., Carrer, C. ., & Farzin, Y. . (2009). Explaining international differences in genetically modified food labelling regulation. *Review of International Economics*, 17(3), 393–408.
- Grunert, K. G., Bredahl, L., & Scholderer, J. (2003). Four questions on European consumers' attitudes toward the use of genetic modification in food production. *Innovative Food Science & Emerging Technologies*, 4(4), 435–445. doi:10.1016/S1466-8564(03)00035-3
- Habibi-najafi, M. B. (2006). Food Biotechnology and its Impact on Our Food Supply.

- Biotechnology & Biochemistry*, 1(1), 22–27.
- Hagedoorn, J. (2003). Sharing intellectual property rights - an exploratory study of joint patenting amongst companies. *Industrial and Corporate Change*, 12, 1035–1050.
- Haines, D. . (2007). Manufacturers and retailers power in retailer response to trade discounts. *Academy of Marketing Study Journal*, 11(2), 1–18.
- Hair, F. J., Black, W. ., Babin, B. ., Anderson, R. ., & Tatham, R. . (2006). *Multivariate Data Analysis* (6th ed.). United States: Prentice Hall.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis: A Global Perspectives* ((7th Editi.). New Jersey: Pearson.
- Hair, J. F., Money, A. H., Samouel, P., & Page, M. (2007). *Research methods for business*. West Sussex: John Wiley & Sons.
- Halford, N. G., & Shewry, P. R. (2000). Genetically modified crops: methodology, benefits, regulation and public concerns. *British Medical Bulletin*, 56(1), 62–73.
- Hamilton N. D. (2001). Legal Issues Shaping Society's Acceptance of Biotechnology and Genetically Modified Organisms. *Drake Journal of Agricultural Law*.
- Hartmann, M., Khali, S., Bernet, T., Ghamdi, A. Al, & Ruhland, F. (2012). Legal and institutional framework of Saudi Arabia's organic sector. *Organic Agriculture in Saudi Arabia*, 38–41. Retrieved from <http://www.giz.de/en/downloads/giz2012-organic-agriculture-saudi-arabia-en.pdf>
- Henchion, M., McCarthy, M., Greehy, G., Williams, G., & Kavanagh, G. (2013). *Irish consumer and industry acceptance of novel food technologies : research highlights , implications and Recommendations*. Ashtown, Dublin.
- Henderson, A., Weaver, C. K., & Cheney, G. (2007). Talking “facts”: identity and rationality in industry perspective on genetic modification. *Discourse Study*, 9(1), 9–41. doi:10.1177/1461445607072105
- Henney, C. (1998). Scenes from an unlikely marriage: building a corporate culture in biotechnology. *National Biotechnology*, 16, 43–44.
- Hoban, T. (2004). *Agricultural Economics and development Division , Food and Agriculture Organization of the United Nations. Public attitudes towards agricultural biotechnology*.
- Hobbs, J. E., & Goddard, E. (2015). Consumers and trust. *Food Policy*, 52, 71–74. doi:10.1016/j.foodpol.2014.10.017
- Hodgson, J. (1999). EC says 1% is acceptable GMO "contamination. *National Biotechnology*, 17(12), 1155–1156.
- Hofer, C. W., & Schendel, D. (1978). *Strategy formulation, analytical concepts*. St. Paul, MN: West Publishing.
- Hofstede, G. (1991). *Cultures and organizationa*. New York: McGraw-Hill.
- Hokanson, K., & Ferenczi, A. (2011). *Systems to regulate genetically engineered plants. Similarities and differences among countries. Environmental Safety of Genetically Engineered Crops*. (G. Grumet, J. Hancock, K. Maredia, & C. Weebaddee, Eds.).

East Lansing, USA, Michigan State University.

- Hood, E. E., Requensen, D. V., & Eversole, K. A. (2012). The regulatory framework. In *Regulatory issue of biotechnologically improved plants*. doi:10.116/B978-0-12-381466-1
- Hornibrook, S. a., & Fearn, A. (2003). Managing perceived risk as a marketing strategy for beef in the UK foodservice industry. *International Food and Agribusiness Management Review*, 6(3), 70–93.
- Hosford-Dunn, H., Hush, J., & Sandlin, R. (2000). *Acceptance benefit and satisfaction measures of hearing aid user attitudes*. San Diego, California: Singular Publisher Group. Retrieved from [http://books.google.co.in/books?hl=en&lr=&id=MZDu1Sti69kC&oi=fnd&pg=PA467&dq=Acceptance+benefit+and+satisfaction+measures+of+hearing+aid+user+attitudes&ots=8bloGQnWMv&sig=Fbr\\_uZey8IXBI7IxMqCgbvoHGnQ&redir\\_esc=y#v=onepage&q=Acceptance benefit and satisfact](http://books.google.co.in/books?hl=en&lr=&id=MZDu1Sti69kC&oi=fnd&pg=PA467&dq=Acceptance+benefit+and+satisfaction+measures+of+hearing+aid+user+attitudes&ots=8bloGQnWMv&sig=Fbr_uZey8IXBI7IxMqCgbvoHGnQ&redir_esc=y#v=onepage&q=Acceptance benefit and satisfact)
- House, L., Morrow, B., Lusk, J., & Moore, M. (2001). Modelling consumer acceptance of and willingness to pay for genetically-modified foods in the United States and the European Union. In *The World Food and Agribusiness Symposium*. Sydney, Australia.
- Hunt, S., & Frewer, L. J. (2001). Trust in sources of information about genetically modified food risks in the UK. *British Food Journal*, 103(1), 46 – 62.
- Hussin, F., Ali, J., & Noor, M. S. Z. (2014). *Kaedah penyelidikan & analisis data SPSS*. Sintok: UUM Press.
- Ibrahim, B., Rezai, G., Mohamed, Z. A., & Sharifuddin, J. (2013). Malaysian consumer awareness and GM food : What are the factors influencing?
- Indrani, T., Siwar, C., Hossain, M. A., & Vijian, P. (2001). *Situation of Agriculture in Malaysia - A cause for concern* (September .). Selangor: Education and Research Association for Consumers Malaysia (ERA Consumers Malaysia).
- Inghelbrecht, L., Dessein, J., & Huylenbroe, G. Van. (2015). Explaining the present GM business strategy on the EU food market : The gatekeepers' perspective. *New Biotechnology*, 32(1).
- Inghelbrecht, L., Dessein, J., & Huylenbroeck. (2014). The non-GM crop regime in the EU : How do industries deal with this wicked problem. *Journal of Life Science*.
- Ismail, K., Azhar, T. N. T., Yong, C. Y., Aslan, a. S., Omar, W. Z., Majid, I., & Ajagbe, a. M. (2012). Problems on Commercialization of Genetically Modified Crops in Malaysia. *Procedia - Social and Behavioral Sciences*, 40, 353–357. doi:10.1016/j.sbspro.2012.03.199
- Ismail, K., Soehod, K., Vivishna, S., Khurram, W., Jafri, S. khuram A., & Ramily, M. K. (2012). Genetically modified food and consumer purchase intentions : A study in Johor Bharu. *International Journal of Business and Social Science*, 3(5), 197–208.
- Jackson, S. ., & Dutton, J. . (1988). Discerning threats and opportunities. *Administrative Science Quarterly*, 33, 370–387.

- Jaffe, G. (2004). Regulating transgenic crops. A comparative analysis of different regulatory processes. *Transgen. Res.*, 13, 5–19.
- James, C. (2010a). *Global status of commercialized biotech/GM crops : International service for the Acquisition of Agri-Biotech Applications*. New York.
- James, C. (2010b). *Global status of commercialized biotech/GM crops : International service for the Acquisition of Agri-Biotech Applications*. New York.
- Jaramillo, paul E. (2009). *Farmer's valuation and adoption of new genetically modified corn seeds : nitrogen-fertilizer saving and drought tolerance traits*.
- Jasanoff, S. (1995). *Product, Process or Programme: Three Cultures and the Regulation of Biotechnology. Resistance to New Technology*. (M.Bauer, Ed.) (Nuclear po.). Cambridge University Press.
- Jaupi, A., Marku, S., & Bajraktari, E. (2014). Review of the regulatory framework on genetically modified food and feed in Albania : a policy perspective. *Agricultural Science*.
- Jayaraman, K. (1999). India intends to reap the full commercial benefits. *Nature*, 402, 342–343.
- Jennings, R. (1998). Cementing links between industry and the university. *National Biotechnology*, 16, 35–36.
- Jinap, et al. (2008). *Malaysia in pacific food system outlook*.
- Jonas, D., & Kaferstein, F. (1995). Genetic modification and food safety. *Biotech Dev Monit*, 25, 11–2.
- Kaplan, R. S., & Norton, D. P. (2001). Principle 1: Translate Strategy into Operational Terms. In *The strategy-focused organization* (Vol. 23).
- Kasperson, R. ., Golding, D., & Kasperson, J. X. (1996). Credibility, information preferences and information interests. *Risk Analysis*, 16(2), 251–261.
- Kikulwe, E. M., Wesseler, J., & Falck-zepeda, J. (2011). Attitudes, perceptions, and trust. Insights from a consumer survey regarding genetically modified banana in Uganda. *Appetite*, 57, 401–413. doi:10.1016/j.appet.2011.06.001
- Kimenju, S. C., De Groote, H., Bett, C., & Wanyama, J. (2011). Farmers, consumers, and gatekeepers and their attitude towards biotechnology. *African Journal of Biotechnology*, 10(23), 4767–4776.
- Kimenju, S. C., De Groote, H., Karugia, J., Mbogoh, S., & Poland, D. (2005). Consumer awareness and attitudes toward GM foods in Kenya. *African Journal of Biotechnology*, 4(10).
- Knight, J. G., Holdsworth, D. K., & Mather, D. W. (2008). Perspective GM food and neophobia: connecting with the gatekeepers of consumer choice. *Journal of the Science of Food and Agriculture*, 88, 739–744.
- Knight, J., & Paradkar, A. (2008). Acceptance of genetically modified food in India: perspectives of gatekeepers. *British Food Journal*, 110(10), 1019–1033. doi:10.1108/00070700810906633

- Kogut, B. (1991). Country capabilities and permeability of borders. *Strategic Management Journal*, 12, 33–47.
- Kostava, T. (1999). Transnational transfer of strategic organizational practices: A contextual perspective. *Academy of Management Review*, 24, 308–324.
- Kostova, T. (1997). Country institutional profile. *Academy of Management Best Paper Proceedings*, 180–184.
- Kostova, T., & Roth, K. (2002). Adoption of an organizational practice by subsidiaries of multinational corporations: Institutional and relational effects. *The Academy of Management Journal*, 45(1), 215–233.
- Kostova, T., Roth, K., & Dacin, M. T. (2008). Theory in the study of multinational corporations: A critique and new directions. *The Academy of Management Review*, 33(4), 994–1006.
- Kothamasi, D., & Vermeylen, S. (2011). Genetically modified organism in agriculture: can regulation work? *Environment and Development Sustainable*, 13, 535–546.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research. *Educational and Psychological Measurement*, 30, 607–610.
- Kruft, D. (2001). *Impact of Genetically-Modified Crops and Seeds on Farmers*.
- Kumar, M., Talib, S. A., & Ramayah, T. (2013). *Business research methods*. Malaysia: Oxford University Press.
- Kuznesof, S., & Ritson, C. (1996). Consumer acceptability of genetically modified foods with special reference to farmed salmon. *British Food Journal*, 98(4/5), 39–47. doi:10.1108/00070709610119874
- Lahteenmaki, L., Grunert, K. G., Astrom, A., Uelond, O., Arvola, A., & Bech-Larsen, T. (2002). Acceptability of genetically modified wheese presented as real product alternative. *Food Quality and Preference*, 13, 523–534.
- Lang, J. T. (2013). Elements of public trust in the America food system: Expert, organization and genetically modified food. *Food Policy*, 41, 145–154.
- Langtree, L. (2014). GM food-GM food list and information. Retrieved from <http://www.disabled-world.com/fitness/gm-foods.php>
- Latacz-Lohmann, U., & Foster, C. (1997). From “niche” to “mainstream” - strategies for marketing organic food in Germany and the UK. *British Food Journal*, 99(8), 275 – 282.
- Lavoie, B., & Sheldon, I. (2000). The comparative advantage of real options: an explanation for the US specialization in biotechnology. *AgBioForum*, 3(1), 47–52. Retrieved from <http://www.agbios.com/articles/2000215-A.htm>
- Lawler, C., Meer, V. der R., & Viseur, J. (1998). Transferring EU-funded biotechnology research to European bioindustry. *National Biotechnology*, 16, 494.
- Levidow, L., & Bijman, J. (2002). Farm Inputs under Pressure from the European Food Industry. *Food Policy*, 27(1), 31–45.
- Li, Q., Curtis, K., McCluskey, J., & Wahl, T. (2002). Consumer attitudes toward



- genetically modified foods in Beijing, China. *Agbioforum*, 5, 145–152.
- Libby, R., & Fishburn, P. C. (1977). Behavioral Model of risk taking in business decisions : A survey and evaluation. *Journal of Accounting Research*, 15(2), 272–292.
- Lim, L. C. (2015, July). Malaysians have been eating Frankenfoods. *Theantdaily*. Retrieved from <http://www.theantdaily.com/Main/Malaysians-have-been-eating-Frankenfoods>
- Lin, C., & Chang, Y.-C. (2012). Retailers' new product acceptance decisions : incorporating the buyer- supplier relationship perspective. *Business and Industrial Marketing*, 27(2), 89–99.
- Liver, Y. de, Pligt, van der, & Wighboldus, D. (2005). Unpacking attitudes towards genetically modified food. *Appetite*, 242–249.
- Lusk, J. L., & Coble, K. H. (2005). Risk Perceptions, Risk Preference, and Acceptance of Risky Food. *American Journal of Agricultural Economics*, 87(2), 393–405.
- MacKenzie, D. (2000). *International comparison of regulatory frameworks for food products of biotechnology*. Canadian Biotechnology Advisory Committee (CBAC).
- Malaysian Biotechnology Corporation. (2010). *Malaysian Biotechnology Country Report 2009/2010*.
- Malaysian Department of Statistic. (2014). Press Release Gross Domestic Product (GDP) Third Quarter of 2014. Retrieved from [http://www.statistics.gov.my/portal/images/stories/files/LatestReleases/gdp/2014/GDP\\_PRESS\\_RELEASE\\_Q3\\_2014.pdf](http://www.statistics.gov.my/portal/images/stories/files/LatestReleases/gdp/2014/GDP_PRESS_RELEASE_Q3_2014.pdf)
- Malaysian Investment Development Authority. (2014). Food technology and sustainable resources. Retrieved from <http://www.mida.gov.my/home/food-technology-and-sustainable-resources/posts/>
- Malaysian Science and Technology Information Centre. (2014). National Biotechnology Policy. Retrieved from <http://www.mastic.gov.my/en/web/guest/polisi-kebangsaan-bioteknologi>
- March, J. G., & Shapira, Z. (1987). Managerial Perspectives on risk and risk taking. *Management Science*, 33(11), 1404–1418.
- March, J. G., & Shapira, Z. (1987). Managerial perspectives on risk and risk taking. *Management Science*, 33, 1404–1418.
- Marchant et al. (2004). Issues on Adoption, Import Regulation, and Policies for Biotech Commodities in China with a Focus on Soybeans. *AgBioForum*, 5(4), 167–174. Retrieved from <http://www.agbioforum.org/v5n4>
- Martinez, M. G., Fearne, A., Caswell, J. A., & Henson, S. (2007). Co- regulation as a possible model for food safety governance : opportunities for public-private partnership. *Food Policy*, 32, 299–314.
- Mather, D. W., Knight, J. G., Insch, A., Holdsworth, D. K., Ermen, F., & Breitbarth, T. (2012). Social stigma and consumer benefits : trade-offs in adoption of genetically modified foods. *Science Communication*, 34(4), 487–519.

doi:10.1177/1075547011428183

- MATRADE. (2014). Labelling requirement in Chile. Retrieved June 12, 2014, from [url:http://www.matrade.gov.my/en/archive/archive-press-release-2013/2948-msian-food-a-beverages-companies-received-good-response-from-chiles-top-food-importers-4-july2013](http://www.matrade.gov.my/en/archive/archive-press-release-2013/2948-msian-food-a-beverages-companies-received-good-response-from-chiles-top-food-importers-4-july2013)
- MATRADE. (2015). Malaysia halal directory. Retrieved February 28, 2015, from <http://www.matrade.gov.my/en/foreign-buyers/find-malaysian-suppliers-a-service-providers/malaysian-halal-directory>
- Mayer, J. E. (2005). *Development and impact of golden rice*. Washington, DC.
- McCluskey, J. ., Grimsrud, K. ., & Wahl, T, L. (2006). *Comparison of consumer responses to genetically modified foods in Asia, North America and Europe. Natural resource management and policy* (Vol. 30). US: Springer.
- McHugen, A., & Smyth, S. (2008). US regulatory system for genetically modified (genetically modified organism (GMO), rDNA or transgenic crop cultivars. *Plant Biotechnology Journal*, 6, 2–12.
- Mclean, M., Frederick, R., Traynor, P., Cohen, J., & Komen, J. (2003). *A framework for biosafety implementation: report of a meeting. The Hague, The Netherlands: International Service for National Agriculture Research (ISNAR) Biotechnology Service, July.*
- McIntosh, C., & Turnbull, J. (2006). *Oxford advanced learner dictionary. International student edition* (seventh.).
- Mendenhall, C. (2000). Willingness to pay a premium for non-genetically modified foods. In *4th ICABR International Conference on the Economics of Agricultural Biotechnology* (pp. 934–965). Ravello, Italy.
- Meyers, L. S., Gamst, G. C., & Guarino, A. J. (2013). *Performing data analysis using IBM SPSS*. Canada: John Wiley & Sons, Inc.
- Meyers, L. S., Gamst, G., & Guarino, A. J. (2006). *Applied multivariate research. Design and interpretation*. London: SAGE Publications.
- Ministry of International Trade and Industry Malaysia. (2006). *Third Industrial Master Plan 2006-2020*.
- Ministry of International Trade and Industry Malaysia. (2014). Trade and investment in services. Retrieved from <http://myservices.miti.gov.my/services-sector-may-contribute-more-to-malaysia-s-gdp-growth>
- Ministry of Science Technology and Innovation (MOSTI). (2010). *Malaysian biotechnology statistical indicator*.
- Mintzberg, H., & McHugh, A. (1985). *Strategic formulation in an adhocracy. Administrative Science Quarterly*.
- Mitra, J., Tait, J., & Wield, D. (2011). From maturity to value-added innovation : lessons from the pharmaceutical and agro-biotechnology industries. *Journal Article*, 29(3), 105–109. doi:10.1016/j.tibtech.2010.11.004
- Morris, S. H., & Adley, C. C. (2000). Genetically modified food issues. *British Food*

- Journal*, 102(9), 669–691.
- Moses, V. (1999). Biotechnology products and European consumers. *Biotechnology Advances*, 17(8), 647–678.
- Mucci, A., Hough, G., & Ziliani, C. (2004). Factors that influence purchase intent and perceptions of genetically modified foods among Argentine consumers. *Food Quality and Preference*, 15, 559–567. doi:10.1016/j.foodqual.2004.02.004
- MyGovernment. (2015). Small medium industries (SMI). Retrieved February 25, 2015, from <http://mygov.malaysia.gov.my/EN/RelevantTopics/IndustryInMalaysia/Business/BusinessManufacturing/Pages/BusinessManufacturing.aspx>
- Nap, J., Metz, P., Escaler, M., & Conner, A. (2003). The release of genetically modified crops into the environment Part I. Overview of current status and regulations. *The Plant Journal*, 33(1), 18.
- NEW ZELAND. (1993). *Biosecurity Act*.
- NEW ZELAND. (1996). *Hazardous Substances and New Organisms Act (HSNO Act)*.
- Nielsen, J. (1993). *Usability Engineering*. San Diego, California: Academic Press.
- Nooteboom, B. (1994). Innovation and diffusion in small firms : theory and evidence. *Small Business Economics*, 6, 327–347.
- Normann, R., & Ramirez, R. (1993). From value chain to value constellation : designing interactive strategy. *Harvard Business Review*, 65–77.
- Nunnally, J. . (1978). *Psychometric theory*. New York: McGraw-Hill.
- Oliver, C. (1991). Strategic responses to institutional processes. *Academy of Management Review*, 16, 145–179.
- Onyango, B., Govindasamy, R., Hallman, W., Jang, H., & Puduri, V. . (2004). Consumer acceptance of genetically modified foods in Korea : Factor and cluster analysis. In *Paper presented at northeast agricultural and resource economic association and canadian agricultural economics society annual meeting*. Halifax, Nova Scotie.
- Opara, L. U. (2003). Traceability in agriculture and food supply chain : A review of basic concepts , technological implications , and future prospects. *Food, Agricultural & Environment*, 1(1), 101–106.
- Oxford Dictionaries. (2015). Definition of regulation. Retrieved March 1, 2015, from <http://www.oxforddictionaries.com/definition/english/regulation>
- Paarlberg, R. . (2002). The real threat to GM crops in poor countries: consumer and policy resistance to GM foods in rich countries. *Food Policy*, 27(3), 247–50.
- Pablo, A. (1997). Reconciling predictions of decision making under risk : insights from a reconceptualized model of risk behaviour. *Journal of Managerial Psychology*, 1, 4–20.
- Pallant, J. (2011). *SPSS Survival Manual: A step by step guide to data analysis using SPSS for Windows* (4th ed.). Sydney, Australia: Allen & Unwin.
- Pelletier, D. L. (2006). FDA's regulation of genetically engineered foods : Scientific,

- legal and political dimensions. *Food Policy*, 31, 570–591.
- Pijawka, K. D., & Mushkatel, A. H. (1991). Public opposition to the siting of high-level nuclear waste repository : The importance of trust. *Policy Studies Review*, 10(4), 180–194.
- Pilgrim, F. J. (1956). The Components of food acceptance and their measurement. *American Journal of Clinical Nutrition*, 5(2), 171–175.
- Porter, M. (1990). The competitive advantage of nations. *Harvard Business Review*, 68, 73–93.
- Prati, G., Pietrantoni, L., & Zani, B. (2012). The prediction of intention to consume genetically modified food : Test of an integrated psychosocial model. *Food Quality and Preference*, 25(2), 163–170. doi:10.1016/j.foodqual.2012.02.011
- Purcell, D. (1999). Financing biotechnology in an efficient market. *National Biotechnology*, 17, 31–32.
- Purchase, I. F. H. (2005). What determines the acceptability of genetically modified that can improve human nutrition? *Toxicology and Applied Pharmacology*, 207, S19–S27.
- Quah, S.-C. (2007). Biotechnology in Malaysia : A current perspective. *Biotechnology in Malaysia and Thailand*, 11(8), 457–463.
- Ramessar, K., Capell, T., Twyman, R., Quemada, H., & Christou, P. (2009). Calling the tunes on transgenic crops: the case for regulatory harmony. *Mol. Breeding*, 23, 99–112.
- Regan, M. ., Mitsopoulos, E., Haworth, N., & Young, K. (2002). *Acceptability of in-vehicle intelligent transport system to Victorian car drivers*. Australia.
- Reg-Garcia, P. (2006). Directive 2001/18/EC on the deliberate release into the environment of GMOs : an overview and the main provisions for placing on the market. *Journal European Environmental Plan*, 3, 3–12.
- Rhodes, C. (2012). *Industrial policy since 2010*.
- Robert, H., & Brockhaus, S. (1980). Risk taking propensity of entrepreneurs. *The Academy of Management Journal*, 23(3), 509–520.
- Rodríguez-entrena, M., & Salazar-ordóñez, M. (2013). Influence of scientific – technical literacy on consumers’ behavioural intentions regarding new food, 60, 193–202. doi:10.1016/j.appet.2012.09.028
- Rogers, E. M. (1995). *Diffusion of innovations* ((4th ed.)). New York: Free Press.
- Rogers-Hayden, T., Mohr, A., & Pidgeon, N. (2007). Introduction: engaging with nanotechnologies - engaging differently? *Nano- Ethics*, 1, 123–130.
- Rollin, F., Kennedy, J., & Wills, J. (2011). Consumers and new food technologies. *Trends in Food Science and Technology*, 22(2-3), 99–111. doi:10.1016/j.tifs.2010.09.001
- Ross, R. ., Pandey, V., & Ross, K. . (2012). *Sustainability and firm strategy in US agrifood companies : An overview of current approaches*. Michigan State

University.

- Rudder, A. (2001). Case Study New food product development : strategies for success. *British Food Journal*, 103(9), 657–670. doi:10.1108/00070700110407012
- Saad, L. (1999). What biotech food issue? Gallup new survey. Retrieved February 5, 2015, from <http://www.gallup.com/poll/releases/pr991005.asp>
- Saegusa, A. (2000). Japan steps up GMO tests. *Nature Biotechnology*, 18, 131.
- Saguy, I., & Sirotinskaya, V. (2014). Challenges in exploiting open innovation's full potential in the food industry with a focus on small and medium enterprises (SMEs). *Trends in Food Science & Technology*, 38(2), 136–148. doi:10.1016/j.tifs.2014.05.006
- Salehuddin, N., Ahmad, M., & Kadir, S. A. (2014). Struktur dan konsistensi sikap makanan terubah suai genetik pengguna muslim : cadangan kerangka konseptual. *Management Journal*, 41(57-67).
- Sanvido, O., Widmer, F., Winzeler, M., & Bigler, F. (2005). A conceptual framework for the design of environmental post-market monitoring of genetically modified plant. *Environmental Biosafety*, 4, 13–27.
- Schilter, B., & Constable, A. (2002). Regulatory control of genetically modified (GM) foods : likely development. *Toxicology Letters*, 127, 341–349.
- Sekaran, U. (2010). *Research methods for business* (5th ed.). Hoboken, NJ: John Wiley & Sons.
- Sekaran, U., & Bougie, R. (2009). *Research methods for business. A skill building approach* (1st ed.). West Sussex, UK: John Wiley & Sons, Ltd, Publication.
- Sekaran, U., & Bougie, R. (2013). *Research methods for business* (sixth.). John Wiley & Sons, Inc.
- Shalhevet, S., Sason, N., Sherbo, A., & Sendler, I. (1988). *Analyzing consumer preferences for low-fat olives*. Israel : Tel, Aviv University: Faculty of Management.
- Sharma, S. (1997). A longitudinal investigation of corporate environmental responsiveness : antecedents and outcomes. In *Academy of Management Best Paper proceedings* (pp. 460–464). Boston, MA.
- Sharma, S., & Nguan, O. (1999). The biotechnology industry and strategies of biodiversity conservation : The influence of managerial interpretations and risk propensity. *Business Strategy and the Environment*, 8, 46–61.
- Sharma, S., Pablo, A., & Vredenburg, H. (1999). Corporate environmental responsiveness strategies : the importance of issue interpretation and organizational context. *The Journal of Applied Behavioral Science*.
- Sheikkha, M. H., Kalantar, S. M., & Vahidi, A. R. (2006). Public knowledge and perceptions of biotechnology and genetically modified organisms in Iran. *Iranian Journal of Biotechnology*, 4(2).
- Sheth, J. . (1973). A model of industrial buying behaviour. *Journal of Marketing*, 37(4), 50–60.

- Shoemaker, R. (2001). Economic issue in agriculture biotechnology. *Agriculture Information Bulletin*. Retrieved from <http://www.ers.usda.gov/publications/aib762/762fm.pdf>
- Shrestha, M. P., & Shrestha, I. (2002). *Public Health Dimension of Food Security*.
- Siegrist, M. (1999). A causal model explaining the perception and acceptance of gene technology. *Journal of Applied Social Psychology*, 29(10), 2093–2106.
- Siegrist, M. (2000). The influence of trust and perceptions of risk and benefit on the acceptance of gene technology. *Risk Analysis*, 20, 195–203.
- Siegrist, M., Cvetkovic, G. ., & Roth, C. (2000). Salient value similarity, social trust, and risk/benefit perception. *Risk Analysis*, 20(3), 353–362.
- Siipi, H., & Launis, V. (2009). Opposition and Acceptance of GM-food and GM-medicine. *The Open Ethics Journal*, 3, 97–103.
- Sitkin, S. B., & Pablo, A. L. (1992). Reconceptualizing the determinants of risk behaviours. *Academy of Management Review*, 17(1), 9–38.
- Sjoberg, L. (1999). *Perceived competence and and motivation in industry and government as factor in risk perception*. London: Earthscan publication.
- Solleiro, J., & Galvez, A. (2002). Latin American biosafety regulatory framework. *International Journal of Biotechnology*, 4, 306–320.
- Sorgot, A., & Ambrozic-Dolinseks, J. (2010). Knowledge of, attitudes toward, and acceptance of genetically modified organism among prospective teachers of biology, home economics, and grade school in Slovenia. *Biochemistry and Molecular Biology Education*, 38(3), 141–150.
- Spielman, D. J., Kolady, D. E., Cavaleiri, A., & Rao, C. N. (2014). The seed and agricultural biotechnology industries in India : An analysis of industry structure, competition and policy option. *Food Policy*, 45, 88–100.
- Stalk, J. G., & Evans-Clark, P. (1992). Competing on capabilities: The new rules of corporate strategy. *Harvard Business Review*, 70(2), 54.
- Starr, C. (1969). Social benefit versus technological risk. *Science*, 165, 1232–1238.
- Stearns, T. M., Carter, N. M., Reynolds, P. D., & Williams, M. L. (1995). New Firm Survival : industry, strategy and location. *Business Venturing*, 10(March 1993), 23–42.
- Stephensons, M. C., & Arujanan, M. (2011). *Communication : Addressing the Challenges in Communicating Agribiotechnology in Muslim Countries*.
- Sternquist, B. (1994). No Title. *International Review of Retail Distribution and Consumer Research*, 4(2), 157–176.
- Stone, D. L., Stone-romero, E. F., & Lukaszewski, K. (2006). Factors affecting the acceptance and effectiveness of electronic human resource systems. *Human Resource Management Review*, 16, 229–244. doi:10.1016/j.hrmr.2006.03.010
- Streiner, D. L., & Norman, G. R. (1995). *Health measurement scales. A practical guide to their development and use* (Second.). New York: Oxford University Press.

- Stronen, T. H. F. H. (2011). Innovation, strategy, and identity : a case study from the food industry. *Innovation Management*, 14(3), 345–363.
- Subrahmanyam, S., & Cheng, P. S. (2000). Perceptions and attitudes of singaporeans toward genetically modified food. *Journal of Consumer Affairs*, 34(2), 269–90.
- Sung, B., & Hwang, K. (2013). Firm's intentions to use genetically modified organisms industrially : The influence of sociopolitical-economic forces and managerial interpretations in the Korean context. *Technological Forecasting & Social Change*, 80, 1387–1394.
- Svensson, E. D. (2013). Validity Scale. In *International Encyclopedia of Statistical Science* (pp. 1637–1639). Springer Berlin Heidelberg. doi:10.1007/978-3-642-04898-2\_98
- Szulanski. (1996). Exploring internal stickiness : Impediment to the transfer of best practice within the firm. *Strategic Management Journal*, 17, 27–43.
- Tabachnick, B. G., & Fidell, L. . (2007). *Using multivariate statistics* (5th ed.). Boston, MA: Allyn & Bacon.
- Tait, J., & Chataway, J. (2007). The governance of corporations , technological change , and risk : examining industrial perspectives on the development of genetically modified crops. *Environment and Planning C: Government and Policy*, 25(1), 21–38. doi:10.1068/c0615j
- Tait, J., & Williams, R. (1999). Policy approaches to research and development : foresight, framework and competitiveness. *Science and Public Policy*, 26(2), 101–112.
- Talib, H. @ H. A., Ali, K. A. M., & Jamaludin, K. R. (2008). Quality Assurance in Halal Food Manufacturing in Malaysia : A Preliminary Study. In *International Conference on Mechanical & Manufacturing Engineering* (pp. 1–5).
- Tanaka, Y. (2004). Major Psychological Factors Affecting Acceptance of Gene-Recombination Technology. *Risk Analysis*, 24(6).
- Tengku Ahmad, T. A. (2015). Dimensions of Food and Livelihood Security of Agricultural Trade: The Case of Malaysia. In *Emerging Economies* (pp. 113–132).
- The Canadian Trade Commissioner Service. (2015). Import Regulations - Malaysia. Retrieved February 28, 2015, from <http://www.tradecommissioner.gc.ca/eng/document.jsp?did=51956&cid=535&oid=79>
- The National Biotechnology Division (BIOTEK). (2010). *Malaysian biotechnology statistical indicator 2010*.
- Thiétart, R.-A., & Wauchope, S. (2001). Sampling method. In *Doing Management Research* (pp. 147–172). London: SAGE Publications Ltd. doi:http://dx.doi.org/10.4135/9781849208970.n8
- Thomas, I. (1998). *Environmental impact assessment in Australia*. Sydney, Australia.
- Thomas, R. ., & McDaniel, J. (1990). Intrepreting strategic issue : effects of strategy and the information-processing structure of top management team. *Academy of*

- Management Journal*, 33(2), 286–306.
- Tummala, V. M. R. et al. (2000). Strategic alliances of China and Hong Kong in manufacturing and their impact on global competitiveness of Hong Kong manufacturing industries. *Integrated Manufacturing Systems*, 11(6), 370–84.
- Turner, L. (1999). Building a better biotech company. *National Biotechnology*, 17, 5–6.
- Uozum, Y. (1999). Japan to bring in mandatory tests for GM food. *Nature*, 402, 846.
- USDA. (2015). People's Republic of China, Food and Agricultural Import Regulations and Standards Food Labeling Standard 200. Retrieved March 1, 2015, from <http://www.fas.usda.gov/regions/china>
- Vaiman, V., Scullion, H., & Collings, D. (2012). Talent management decision making. *Management Decision*, 50(5), 925–941. doi:10.1108/00251741211227663
- Vazquez-Salat, N., Salter, B., Smets, G., & Houdebine, L.-M. (2012). The current state of GMO governance: Are we ready for GM animals? *Biotechnology Advances*, 30, 1336–1343.
- Verdurme, A., & Viaene, J. (2003). Consumer beliefs and attitude towards genetically modified food: Basis for segmentation and implications for communication. *Agribusiness*, 19(1), 91–113. doi:10.1002/agr.10045
- Vermeulan, H., Kirsten, J. ., Doyer, T. ., & Schonfeldt, H. . (2005). Attitude and acceptance of South African urban consumers towards genetically modified white maize. *Agrekon*, 44, 118–137.
- Vermeulen, H. (2004). *Genetically modified white maize in South Africa: consumer perceptions and market segmentation*.
- Vigani, M. (2010). *The political economy of food standards: GMOs regulation and trade*. University Degli Scrudi, Milano.
- Vigani, M., & Olper, A. (2013). GMO standard, endogenous policy and the market for information. *Food Policy*, 43, 32–43.
- Vigani, M., Raimond, V., & Opler, A. (2012). International trade and endogeneous standards: the case of GMO regulations. *World Trade Review*, 11(3), 415–437.
- Vilella-Vila, M., & Costa-Font, J. (2008). Press media reporting effects on risk perceptions and attitudes towards genetically modified (GM) food. *The Journal of Socio-Economics*, 37(5), 2095–2106. doi:10.1016/j.socec.2008.04.006
- Vorley, B. (2007). Supermarkets and Agri-Food Supply Chains in Europe: Partnership and Protest. In Burch and Lawrence (Ed.), *Supermarkets and Agri-Food Supply Chains: Transformations in the Production and Consumption of Foods*.
- Wahab, A. G. (2012). *Malaysia agricultural biotechnology annual*. Retrieved from [http://gain.fas.usda.gov/Recent GAIN Publications/Agricultural Biotechnology Annual\\_Kuala Lumpur\\_Malaysia\\_8-24-2012.pdf](http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Agricultural%20Biotechnology%20Annual_Kuala%20Lumpur_Malaysia_8-24-2012.pdf)
- Wales, C., & Mythen, G. (2002). Risky discourses: the politics of GM foods. *Environmental Politics*, 11(2), 121–144. doi:10.1080/714000604
- Wartburg, W. P. Von, & Julian, L. (1999). *Gene Technology and Social Acceptance*.



- United States of America: University Press of America Inc. Retrieved from [http://books.google.bg/books?hl=en&lr=&id=1LHIopelG1MC&oi=fnd&pg=PR7&dq=gene+technology+and+social+acceptance&ots=t5ZwqoggC\\_&sig=BXcCZqmcbbtC-H-MwnXOj2hiPcA&redir\\_esc=y#v=onepage&q=gene+technology+and+social+acceptance&f=false](http://books.google.bg/books?hl=en&lr=&id=1LHIopelG1MC&oi=fnd&pg=PR7&dq=gene+technology+and+social+acceptance&ots=t5ZwqoggC_&sig=BXcCZqmcbbtC-H-MwnXOj2hiPcA&redir_esc=y#v=onepage&q=gene+technology+and+social+acceptance&f=false)
- Wesseler, J. (2014). Biotechnologies and agrifood strategies : opportunities, threat and economic implication. *Bio-Based and Applied Economics*, 3(3), 187–204.
- Wesseler, J., Scatasta, S., & Fall, E. (2011). The environmental benefits and costs of (GM) crops, in Colin. (I. S. A. Carter, GianCarlo Moschini, Ed.) *Genetically Modified Food and Global Welfare (Frontiers of Economics and Globalization*, 10, 173–199.
- Whitman, D. B. (2000). Genetically modified foods : Harmful or helpful. *Nature*, 399(6733), 214.
- Williams, B., Brown, T., & Onsman, A. (2012). Exploratory factor analysis : A five-step guide for novices. *Australasian Journal of Paramedicine*, 8(3), 1–13. Retrieved from <http://ro.ecu.edu.au/cgi/viewcontent.cgi?article=1373&context=jephc>
- Withold, B. (1999). The European university as a startup generator. *National Biotechnology*, 17, 8.
- Woodside, F., Ogunmokun, G., & Brown, L. R. (2005). *Measuring The Attitudes Of Australian Food Manufacturers Towards Genetically Modified (GM) Foods – A Pilot Study*.
- Xu, D., & Shenker, O. (2002). Institutional distance and the multinational enterprise. *Academy of Management Review*, 27, 608–618.
- Yong, A. G., & Pearce, S. (2013). A beginner's guide to factor analysis : focusing on exploratory factor analysis. *Tutorials in Qualitative Methods for Psychology*, 9(2), 79–94.
- Young, R. (2001). Adventures in Wonderland. *National Biotechnology*, 19, 9–10.
- Zahra, S. A., & Covin, J. G. (1993). Business Strategy, Technology Policy and Firm Performance. *Strategic Management Journal*, 14(6), 451–478. doi:10.1002/smj.4250140605
- Zikmund, W. G. (2010). *Business Research Methods*.
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2010). *Business Research Methods*. Canada: South-Western: Cengage Learning.
- Zilberman, D., & Wesseler, J. (2014). The impacts and acceptance of agricultural biotechnology: an introduction to the special issue. *Environment and Development Economics*, 19, 669–675. doi:0.1017/S1355770X1400062X